

REMARKS

Claims 1-33 are pending in the application.

Claims 1-33 have been rejected.

Reconsideration of the claims is respectfully requested.

I. REJECTION UNDER 35 U.S.C. § 102

Claims 1-28 and 31 were rejected under 35 U.S.C. § 102(b) as being anticipated by Novas (US 5,023,906). The rejection is respectfully traversed.

A cited prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if every element of a claimed invention is identically shown in that single reference, arranged as they are in the claims. MPEP § 2131; *In re Bond*, 910 F.2d 831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990). Anticipation is only shown where each and every limitation of the claimed invention is found in a single cited prior art reference. MPEP § 2131; *In re Donohue*, 766 F.2d 531, 534, 226 U.S.P.Q. 619, 621 (Fed. Cir. 1985).

With respect to independent Claim 1 (and independent Claims 6, 14, 17 and 22), the Office Action asserts that Novas discloses a call progress monitor that operates over a time period that can vary in length, citing Novas, column 20, line 33, to column 21. Applicant respectfully disagrees. The cited passage describes a situation recognizer that invokes a complex pattern matcher to look for, among others, complex pattern STP_IC. See Novas, column 20, lines 62-67. The complex pattern matcher compares the most recent data in a meld list with a pattern specified in Table A5.

See Novas, column 18, line 49, to column 19, line 11. The STP_IC pattern is specified in the second entry of Table A5 as having a fixed duration of 0.928 seconds – composed of three tones of durations 0.274, 0.274 and 0.380 seconds each. Until the complex pattern matcher has 0.928 seconds of input data, it cannot recognize the STP_IC pattern. Thus, the Novas reference teaches a pattern matcher employing a processing period of fixed duration.

In contrast, Claim 1 recites an apparatus for performing cadence detection on a signal, comprising a signal processing functional block, operative to successively compute cadence confidence level values during a processing period of variable duration. Independent Claims 6, 14, 17, 22 and 27 recite a similar element/feature. As such, Novas fails to disclose every element/feature of Applicant's invention arranged as they are in independent Claims 1, 6, 14, 17, 22 and 27 (and Claims 2-5, 7-10, 15, 16, 18-21 and 23-26 depending therefrom). 

Independent Claim 11 recites that the duration of the processing period for computing cadence confidence level values is controlled based upon the currently computed confidence level value. This, too, is different than the processing period of fixed duration taught for the complex pattern matcher in the Novas reference. Therefore, Novas fails to disclose every element/feature of Applicant's invention arranged as they are in independent Claim 11, and Claims 12 and 13 depending therefrom. 

With respect to independent Claim 28, the Office Action asserts that the claim is essentially the same as Claim 17 and rejects Claim 28 for the same reasons given for Claim 17. Claim 31 is similarly characterized as essentially the same as Claim 28, and rejected for the same reasons.

Because Claim 28 recites a logical processing unit, which is not recited in Claim 17, the Applicant respectfully asserts that the Office Action does not fully and clearly recite the grounds for the rejection of Claim 28. However, the Novas reference fails to show every element of the invention recited in Claims 28 and 31. ✓

Novas recites a system that divides the input signal into processing time intervals called 'epochs.' See Novas, column 7, lines 38-39. The tone detection module processes audio sample input data and produces an output every epoch. Novas, column 7, lines 35-38. The signal recognition unit is run for each epoch, accepting the output of the tone detection module for that epoch and producing the name of the signal that best matches the audio sample input data for that epoch. Novas, column 10, lines 11-15. Thus, the signal recognition module of the Novas reference produces an output classifying the audio input data for a single epoch, or time segment.

In contrast, Claim 28 recites a tone detection apparatus comprising a spectral processing unit that produces a plurality of sets of data elements, each set providing information about a respective time segment of an input signal, and a logical processing unit which receives and processes the sets of data elements to compute classification elements for respective segments of the input signal. Similarly, Claim 31 recites a method comprising processing an input signal to generate a plurality of sets of data elements providing spectral information about respective time segments of the input signal, and processing the sets of data elements to compute classification elements for respective time segments of the input signal. Thus, the Novas reference teaches a system that recognizes the presence of a signal based upon data from only a single time segment, while the Applicant's ✓

invention computes classification elements based upon data elements from a plurality of time segments. As such, Novas fails to disclose every element/feature of Applicant's invention arranged as they are in independent Claims 28 and 31.

Accordingly, the Applicant respectfully requests the Examiner withdraw the § 102(b) rejection of Claims 1-28 and 31.

II. REJECTION UNDER 35 U.S.C. § 103

Claims 29, 30 and 32 were rejected under 35 U.S.C. § 103 as being unpatentable over Novas in view of Lai (US 5,479,501).¹ The rejection is respectfully traversed.

Claims 29, 30, 32 and 33 depend from independent Claims 28 and 31 and incorporate the features/elements therein recited. Thus, for the same reasons given above with respect to the § 102 rejection of independent Claims 28 and 31, the Novas and Lai references, either alone or in combination, do not disclose, teach or suggest all the features/elements of Claims 29, 30, 32 and 33 and, therefore, a prima facie case of obviousness has not been established.

Accordingly, the Applicant respectfully requests withdrawal of the § 103 rejection of Claims 29, 30, 32 and 33.

¹ Applicant notes that Claim 33, pending in the application, was neither allowed nor rejected in the December 17, 2003, Office Action. Because Claim 33 depends from rejected Claim 32 and includes the limitation of a non-linear filtration unit, Applicant assumes that Claim 33 was inadvertently omitted from the list of claims rejected under 35 U.S.C. 103(a).

III. CONCLUSION

As a result of the foregoing, the Applicant asserts that the remaining Claims in the Application are in condition for allowance, and respectfully requests an early allowance of such Claims.

If any issues arise, or if the Examiner has any suggestions for expediting allowance of this Application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at rmccutcheon@davismunck.com.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Davis Munck Deposit Account No. 50-0208.

Respectfully submitted,

DAVIS MUNCK, P.C.

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Robert D. McCutcheon
Registration No. 38,717

P.O. Drawer 800889
Dallas, Texas 75380
(972) 628-3632 (direct dial)
(972) 628-3600 (main number)
(972) 628-3616 (fax)
E-mail: rmccutcheon@davismunck.com